

## A METHOD OF USING THE TONGUE IN SUPPLYING A DEFECT OF THE CHEEK.

BY WILLARD BARTLETT, M.D.,

OF ST. LOUIS, MO.,

Professor of Experimental Surgery in Washington University.

IT is generally admitted to be very difficult to close an extensive gap in the cheek by any sort of a plastic which contemplates the use of the tissues of the face. The principal difficulty lies in completely clothing the interior with mucous membrane.

But recently I hit upon a plan of accomplishing the desired end with surprisingly little difficulty, even though I had sacrificed practically all the mucous membrane between the upper and lower alveolar processes on one side. The idea is so simple, and the means of relief in such a case lie so near at hand, that I was greatly surprised to find nothing of the same kind readily accessible in the literature of the subject.

The patient was a well preserved man of seventy-one. A year previous to the time that I first saw him, which was December 6, 1906, a sore appeared on the inner surface of the left cheek, he supposing the same to be due to the mucous membrane having been scratched by a tooth. Six weeks before he came to me, what he speaks of as a sore, appeared on the outer surface of the same cheek exactly opposite the interior lesion to which reference has just been made. By the time I saw him these symmetrical lesions were each of them about the size of a quarter, located, as has been mentioned, one of them on the skin, and the other on the mucous membrane of the left cheek, midway of the alveolar processes and about 1 cm. from each of these. The edges of the lesions were elevated, indurated and their bases were semi-necrotic. Evidently the process was carcinomatous.

On December 7, 1906, a circular incision about  $\frac{1}{2}$  cm. away from the diseased tissue, and completely encircling the growth, was made through the entire thickness of the cheek. The result-

ing defect appeared surprisingly large in view of the elasticity and consequent natural retraction of the tissue involved. It was, of course, impossible to bring the mucous membrane edges together, in view of their firm attachment to the alveoli, not more than  $\frac{1}{2}$  cm. away. Confronted by this state of affairs, I made a deep horizontal incision into the side of the tongue, practically separating half of the member into two flaps, an upper and a lower. The edge of the upper flap was sutured with catgut to the fringe of mucous membrane which adhered to the superior maxilla, and the edge of the lower flap was united in like manner close to the inferior maxilla. The separation of these tongue flaps revealed a raw muscle surface, which naturally furnished the best sort of a base upon which to implant the superficial tissues of the cheek. By undermining the skin above and below the external defect, I had no trouble at all in bringing its edges together. A few silkworm sutures were placed through the skin and the body of the tongue, in order not only to approximate the edges of the former, but, at the same time, to obliterate any dead space which might otherwise have formed.

I will state in passing that the patient had no teeth at all on the operated side. Three days after operation a few drops of saliva escaped through the wound; five days afterward all looked well. When eleven days had elapsed, the silkworm sutures were removed and the healing found to be perfect in every particular; the tongue was naturally anchored in place. Fifteen days after the operation I examined the patient and found that chewing, talking and swallowing were absolutely normal. One month after the procedure he expressed himself as being delighted with his condition, the scar was soft and yielding, he had no difficulty in opening and closing his jaws, while the change in his external appearance was surprisingly slight.

An examination of the interior of the mouth showed the tongue firmly fixed in its new position, but still capable of a very wide range of movement.

It may be stated in general that the method could be made applicable to any patient, simply by withdrawing the teeth on the afflicted side, and I am confident that the surgeon who tries it will be astonished at the ease with which he can close almost any defect in the cheek.